



TestCases for the SCA Policy Framework Version 1.1

Committee Specification Draft 03

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This specification is related to:

- SCA Policy Framework Version 1.1. Latest version.
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Declared XML namespaces:

- <http://docs.oasis-open.org/ns/opencsa/scatests/200903>
- <http://test.sca.oasisopen.org/>

Abstract:

This document defines the TestCases for the SCA Policy Framework Specification. The TestCases represent a series of tests that an SCA runtime must pass in order to claim conformance to the requirements of the SCA Policy Framework Specification.

Status:

This document was last revised or approved by the OASIS Service Component Architecture / Policy (SCA-Policy) TC on the above date. The level of approval is also listed above. Check the "Latest version" location noted above for possible later revisions of this document.

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1 Introduction

This document defines the TestCases for the SCA Policy Framework specification. [\[POLICY\]](#)

The tests described in this document are related to the Test Assertions described in [Appendix A, "Test Assertions for the SCA Policy Framework"](#).

1.1 TestCase Structure

The SCA Policy testcases follow a standard structure. They are divided into two main parts:

1. Test Client, which drives the test and checks that the results are as expected
2. Test Application, which forms the bulk of the testcase and which consists of Composites, WSDL files, XSDs and code artifacts such as Java classes, organized into a series of SCA contributions

The basic idea is that the Test Application runs on the SCA runtime that is under test, while the Test Client runs as a standalone application, invoking the Test Application through one or more service interfaces.

Test Client

The test client is designed as a standalone application. The version built here is a Java application which uses the JUnit test framework, although in principle, the client could be built using another implementation technology.

The test client is structured to contain configuration information about the testcase, which consists of:

1. metadata identifying the Test Application in terms of the SCA Contributions that are used and the Composites that must be deployed and run
2. data indicating which service operation(s) must be invoked with input data and expected output data (including exceptions for expected failure cases)

The Java test client consists of a base runtime class, `BaseJAXWSTestCase.java`. Each actual testcase is implemented by a small class which extends the base runtime class. The bulk of the code required to run a test is held in the base runtime class. The small testcase class contains the configuration for the specific test, which it provides to the code in the base runtime class through a standard interface.

The Java test client base runtime class is structured so that there is a replaceable class called the `RuntimeBridge`, which is used to communicate with the SCA runtime under test, for the purposes of deploying and running the test application. Each SCA runtime provider can produce a version of this class. The code within the runtime bridge is likely to be highly proprietary and specific to the SCA runtime for which it is written. Which runtime bridge class is used at runtime is controlled by an environment variable or system variable with the name `"OASIS_TESTENV_RUNTIME_BRIDGE_CLASS"`, which is read by the code in `BaseJAXWSTestCase`.

The Test Client defaults to using Web services to communicate with the test application. The client is structured to permit Web services to be replaced by some other binding (e.g. JMS) should the SCA runtime under test not support Web services as a binding technology.

Test Application

Each Test Application consists of one top level SCA Composite file and one or more other SCA Composite files and their associated artifacts (implementations, interface files), plus test client invocation application described above. A typical test application has a design where the top level composite offers a single service to the client application over a Web services binding. The top level composite contains one component which offers the service that is used by the client application. The top level composite then contains one or more other components which are used by the first component.

All of the components in the top level composite are implemented by composites. These second level composites then contain typically one component, implemented using a specific technology such as Java POJO. In some cases the implementation may be a third level composite.

The application is structured so that alternative technologies can be used. For example, replacing the contents of the second-level or third-level composites allows different implementation technologies to be tested – eg POJOs or BPEL may be used. Similarly, the binding used to connect from the top level composite to the client application may be changed from Web services to JMS if required, simply by changing the binding on the `<service/>` of the top level composite.

Which implementation language to use for test artifacts is controlled by a system variable or environment variable which is read by the test client application, with the name `"OASIS_TESTENV_IMPL_LANG"`. This variable can have one of the following values:

- "Java" - for Java implementations

The testcases are designed so that the range of implementation types can be expanded

Test Artifacts Organization

Note that the design of these testcases promotes reuse of artifacts between testcases, so that many testcases share components. For example, components implementing simple invocable services are all implemented using a single parameterized implementation artifact.

All the test artifacts are contained in a number of Contributions, which are simply filesystem directories which are all peers in the filesystem hierarchy. The names of the directories are the names of the Contributions and the names are significant. The names of Contributions containing implementation type specific artifacts (such as Java classes) are also specially structured to allow for replacement of one type of implementation artifact with another.

Broadly, Contribution names are as follows:

- POL_nnnn - a contribution that is specific for a particular testcase, where "nnnn" is the number of the testcase. Often this is required because a particular testcase involves artifacts that contain errors that are statically checkable - an SCA runtime is permitted to reject such artifacts when they are contributed and deployed and it is important to ensure that contributions containing deliberate errors for one testcase do not interfere with the operation of other testcases.
- General - a shared contribution containing implementation type independent artifacts that can be used by many testcases.
- General_Java - a shared contribution containing implementation type dependent artifacts for Java POJOs. These artifacts can include both Java classes and also SCA composites that directly use Java classes.

Note that the names of Contributions containing implementation specific artifacts ends with a name that is specific to the implementation type - so "_Java" is used for Java implementations. Note that the name following the underscore matches the name used in the "OASIS_TESTENV_IMPL_LANG" variable used to control execution of the test client. The concept is that where there is an implementation type specific contribution, each implementation type must provide its own versions of the same basic artifacts. Typically, this means that each contribution must contain the same set of Composites, but that the implementation type dependent artifacts that these composites use will differ from implementation type to implementation type.

Basically, the setting of the variable is used to select the suffix used for implementation type dependent contributions. If the variable is set to "Java" then the contribution "General_Java" is selected, whereas if the variable is set to "BPEL", the contribution "General_BPEL" is selected.

TestCase Groups

The SCA Policy Framework specification [POLICY] contains some optional capabilities in the way that policySets are attached to SCA composites. Specifically, policySets can be attached directly, externally or both ways. An SCA runtime has the freedom to choose which of those three sets of capability to implement. There are three groups of testcases which match each set of capability. In order to claim compliance to the test suite, an SCA implementation has to pass all the tests in at least one of the three groups. The three groups are defined in Section "Testcases Grouped by Optional Capability".

1.2 Namespaces and Java Package Names

The SCA Policy testcase suite makes use of some XML namespaces and Java package names, as follows:

SCA Artifact Namespaces

These apply to artifacts such as Composites

<http://docs.oasis-open.org/ns/openca/scatests/200903>

WSDL Namespace

<http://test.sca.oasisopen.org/>

Java Package name

For Java interface classes and for Java implementation classes

`org.oasisopen.sca.test`

1.3 Terminology

The keywords "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this specification are to be interpreted as described in [IETF RFC 2119 \[RFC 2119\]](#)

1.4 Normative References

[RFC 2119] S. Bradner. "Key words for use in RFCs to Indicate Requirement Levels". IETF RFC 2119, March 1997.
<http://www.ietf.org/rfc/rfc2119.txt>.

[POLICY] OASIS Committee Draft 04, "SCA Policy Framework 1.1 Specification", September 2010.
<http://docs.oasis-open.org/opencsa/sca-policy/sca-policy-1.1-spec-cd04.pdf>

[TA-GUIDE] **OASIS Committee Draft 05, *Test Assertions Guidelines Version 1.0*, August 2010** <http://docs.oasis-open.org/tag/guidelines/v1.0/cd05/testassertionsguidelines-cd-05.pdf>

1.5 Non-Normative References

N/A

2 TestCases

2.1 Section 3

POL_3001_TestCase

Testcase ID	POL_3001_TestCase
Test Assertion	POL-TA-30001
Description	Tests that the runtime rejects a composite where the use of an intent conflicts with the configuration of the binding itself.
Artifacts	POL_3001_TestCase.java Test_POL_3001.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite Service1.wsdl Service1.java service1Impl.java
Expected output	Negative test: “exception”

POL_3003_TestCase

Testcase ID	POL_3003_TestCase
Test Assertion	POL-TA-30003
Description	Tests that the runtime rejects a definitions file when it contains duplicate intent definitions.
Artifacts	POL_3003_TestCase.java Test_POL_3003.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_3004_TestCase

Testcase ID	POL_3004_TestCase
Test Assertion	POL-TA-30004
Description	Tests that the runtime rejects a definitions file when it contains an intent definition which has two default qualifiers.
Artifacts	POL_3004_TestCase.java Test_POL_3004.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3005_TestCase

Testcase ID	POL_3005_TestCase
Test Assertion	POL-TA-30005
Description	Tests that the runtime rejects a definitions file when it contains an intent definition which has two duplicate qualifiers.
Artifacts	POL_3005_TestCase.java Test_POL_3005.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3006_TestCase

Testcase ID	POL_3006_TestCase
Test Assertion	POL-TA-30006
Description	Tests that the runtime rejects a definitions file when it contains a profile intent definition that contains a '.' in its name.
Artifacts	POL_3006_TestCase.java Test_POL_3006.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3007_TestCase

Testcase ID	POL_3007_TestCase
Test Assertion	POL-TA-30007
Description	Tests that when a profile intent is required, that the attached policySet(s) satisfy all the intents required by the profile intent.
Artifacts	POL_3007_TestCase.java Test_POL_3007.composite TestInvocation.wsdl TestClient_0004.composite

	definitions.xml
Expected output	Positive test: "POL 3007 request no invocation"

POL_3008_TestCase

Testcase ID	POL 3008 TestCase
Test Assertion	POL-TA-30008
Description	Tests that an intentMap provides an unqualified intent that the policySet provides.
Artifacts	POL_3008_TestCase.java Test_POL_3008.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: "POL 3008 request no invocation"

POL_3009_TestCase

Testcase ID	POL 3009 TestCase
Test Assertion	POL-TA-30010
Description	Tests that a policySet only has one intentMap for any given qualifiable intent.
Artifacts	POL_3009_TestCase.java Test_POL_3009.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3011_TestCase

Testcase ID	POL 3011 TestCase
Test Assertion	POL-TA-30013
Description	Tests that a referenced policySet provides a subset of the intents provided by the referencing policySet.
Artifacts	POL_3011_TestCase.java Test_POL_3011.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: "POL 3011 request no invocation"

POL_3012_TestCase

Testcase ID	POL_3012_TestCase
Test Assertion	POL-TA-30015
Description	Tests that the runtime rejects a definitions file when it contains a profile intent definition that requires undefined intents.
Artifacts	POL_3012_TestCase.java Test_POL_3012.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3013_TestCase

Testcase ID	POL_3013_TestCase
Test Assertion	POL-TA-30016
Description	Tests that the runtime rejects a definitions file when it contains a profile intent definition that excludes an undefined intent.
Artifacts	POL_3013_TestCase.java Test_POL_3013.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3014_TestCase

Testcase ID	POL_3014_TestCase
Test Assertion	POL-TA-30017
Description	Tests that the runtime ensures that policySet definitions are unique in the Domain.
Artifacts	POL_3014_TestCase.java Test_POL_3014.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_3015_TestCase

Testcase ID	POL_3015_TestCase
Test Assertion	POL-TA-30018
Description	Tests that the XPath expression in policySet/@appliesTo is valid.

Artifacts	POL_3015_TestCase.java Test_POL_3015.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_3016_TestCase

Testcase ID	POL_3016_TestCase
Test Assertion	POL-TA-30019
Description	Tests that the XPath expression in policySet/@attachTo is valid.
Artifacts	POL_3016_TestCase.java Test_POL_3016.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_3017_TestCase

Testcase ID	POL_3017_TestCase
Test Assertion	POL-TA-30020
Description	Tests that an intentMap specifies all possible qualifiers for a qualifiable intent.
Artifacts	POL_3017_TestCase.java Test_POL_3017.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_3018_TestCase

Testcase ID	POL_3018_TestCase
Test Assertion	POL-TA-30021
Description	Tests that an intentMap provides an intent that is provided by the containing policySet.
Artifacts	POL_3018_TestCase.java Test_POL_3018.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_3019_TestCase

Testcase ID	POL_3019_TestCase
Test Assertion	POL-TA-30025
Description	Tests that intents defined in the Policy spec are in the SCA Domain.
Artifacts	POL_3019_TestCase.java Test_POL_3019.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: “POL_3019 request no invocation”

POL_3020_TestCase

Testcase ID	POL_3020_TestCase
Test Assertion	POL-TA-30026
Description	Tests that an intent definition with one qualifier has the qualifier marked as a default.
Artifacts	POL_3020_TestCase.java Test_POL_3020.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: “POL_3020 request no invocation”

2.2 Section 4

POL_4001_TestCase

Testcase ID	POL_4001_TestCase
Test Assertion	POL-TA-40001
Description	Tests that directly attached policySets are ignored when there are externally attached policySets.
Artifacts	POL_4001_TestCase.java Test_POL_4001.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative: “exception”

POL_4002_TestCase

Testcase ID	POL_4002_TestCase
Test Assertion	POL-TA-40002

Description	Tests that directly attached policySets are supported
Artifacts	POL_4002_TestCase.java Test_POL_4002.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: "POL_4002 request no invocation"

POL_4003_TestCase

Testcase ID	POL_4003_TestCase
Test Assertion	POL-TA-40003
Description	Tests that externally attached policy sets are supported.
Artifacts	POL_4003_TestCase.java Test_POL_4003.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: "POL_4003 request no invocation"

POL_4004_TestCase

Testcase ID	POL_4004_TestCase
Test Assertion	POL-TA-40004
Description	Tests that qualified intents override qualifiable intents in the implementation hierarchy.
Artifacts	POL_4004_TestCase.java Test_POL_4004.composite TestCompositeImplIntent.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4005_TestCase

Testcase ID	POL_4005_TestCase
Test Assertion	POL-TA-40005
Description	Tests that qualified intents override qualifiable intents in the implementation hierarchy of service promotion.
Artifacts	POL_4005_TestCase.java Test_POL_4005.composite TestCompositeImplIntent.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test:

	“exception”
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POL_4006_TestCase

Testcase ID	POL 4006 TestCase
Test Assertion	POL-TA-40006
Description	Tests that intents higher in the structural hierarchy are unioned with intents lower in the structural hierarchy.
Artifacts	POL_4006_TestCase.java Test_POL_4006.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_4007_TestCase

Testcase ID	POL 4007 TestCase
Test Assertion	POL-TA-40007
Description	Tests that intents higher in the structural hierarchy are unioned with non-mutually exclusive intents lower in the structural hierarchy.
Artifacts	POL_4007_TestCase.java Test_POL_4007.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: “POL 4007 request service1 operation1 invoked”

POL_4008_TestCase

Testcase ID	POL 4008 TestCase
Test Assertion	POL-TA-40008
Description	Tests that qualified intents in the structural hierarchy override the unqualified form of the intent.
Artifacts	POL_4008_TestCase.java Test_POL_4008.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: “POL 4008 request service1 operation1 invoked”

POL_4009_TestCase

Testcase ID	POL 4009 TestCase
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Test Assertion	POL-TA-4009
Description	Tests that componentType attached policySets are ignored when policySets are attached to the using component definition.
Artifacts	POL_4009_TestCase.java Test_POL_4009.composite TestCompositeImplPolicySet.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4010_TestCase

Testcase ID	POL_4010_TestCase
Test Assertion	POL-TA-40015
Description	Tests that directly attached policySets are ignored when the runtime does not support directly attached policySets and there are externally attached policySet(s).
Artifacts	POL_4010_TestCase.java Test_POL_4010.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4012_TestCase

Testcase ID	POL_4012_TestCase
Test Assertion	POL-TA-40012
Description	A testcase to verify that mutually exclusive intents cause an error.
Artifacts	POL_4012_TestCase.java Test_POL_4012.composite TestInvocation.wsdl TestClient_0004.composite
Expected output	Negative test: "exception"

POL_4013_TestCase

Testcase ID	POL_4013_TestCase
Test Assertion	POL-TA-40014
Description	A testcase to verify that external attachment of policySets works correctly.
Artifacts	POL_4013_TestCase.java Test_POL_4013.composite TestInvocation.wsdl TestClient_0004.composite

	definitions.xml
Expected output	Positive test: "POL_4013 request no invocation"

POL_4015_TestCase

Testcase ID	POL_4015_TestCase
Test Assertion	POL-TA-40013
Description	Tests that directly attached policySets are ignored when the runtime does not support directly attached policySets.
Artifacts	POL_4015_TestCase.java Test_POL_4015.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4016_TestCase

Testcase ID	POL_4016_TestCase
Test Assertion	POL-TA-40016
Description	Tests that externally attached policySets are ignored when the runtime does not support them.
Artifacts	POL_4016_TestCase.java Test_POL_4016.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4018_TestCase

Testcase ID	POL_4018_TestCase
Test Assertion	POL-TA-40018
Description	Tests that externally attached policySets are ignored when the runtime does not support them, and there are directly attached policySets that are supported.
Artifacts	POL_4018_TestCase.java Test_POL_4018.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4019_TestCase

Testcase ID	POL_4019_TestCase
Test Assertion	POL-TA-40024
Description	Tests that policySets on interfaces apply to bindings and services.
Artifacts	POL_4019_TestCase.java Test_POL_4019.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: "POL_4019 request no invocation"

POL_4020_TestCase

Testcase ID	POL_4020_TestCase
Test Assertion	POL-TA-40025
Description	Tests that policySets on interfaces apply to bindings and services.
Artifacts	POL_4020_TestCase.java Test_POL_4020.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Positive test: "POL_4020 request no invocation"

POL_4024_TestCase

Testcase ID	POL_4024_TestCase
Test Assertion	POL-TA-40027, POL-TA-40028
Description	Tests that when an intent is required, that the attached policySet(s) satisfies the intent.
Artifacts	POL_4024_TestCase.java Test_POL_4024.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite Service1.java Service1.wsdl definitions.xml
Expected output	Positive test: "POL_4024 request service1 operation1 invoked"

POL_4027_TestCase

Testcase ID	POL_4027_TestCase
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Test Assertion	POL-TA-40039
Description	BindingTypes are unique in the Domain.
Artifacts	POL_4027_TestCase.java Test_POL_4027.composite TestInvocation.wsdl TestClient_0004.composite Service1.wsdl definitions.xml
Expected output	Positive test: "exception"

POL_4028_TestCase

Testcase ID	POL_4028_TestCase
Test Assertion	POL-TA-40049
Description	A testcase to verify that an error is raised if policySet/@attachTo points to a property.
Artifacts	POL_4028_TestCase.java Test_POL_4028.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

POL_4029_TestCase

Testcase ID	POL_4029_TestCase
Test Assertion	POL-TA-40020
Description	Tests that where a <component/> has an <implementation/> element which has a service with an attached intent, that the intent applies to the binding of the <component/> <service/> and must be satisfied by that binding.
Artifacts	POL_4029_TestCase.java Test_POL_4029.composite TestInvocation.wsdl Service1.wsdl TestClient_0004.composite TestCompositeSOAP.composite
Expected output	Positive test: "POL_4029 request service1 operation1 invoked"

POL_4030_TestCase

Testcase ID	POL_4030_TestCase
Test Assertion	POL-TA-40021
Description	Tests that where a <component/> has an <implementation/> element which has a service with an attached unqualified form of an intent and the qualified form of the intent is attached to <service/> element of the component, that the qualified form of the intent applies to the <component/> <service/> and must be satisfied by its binding.
Artifacts	POL_4030_TestCase.java

	Test_POL_4030.composite TestInvocation.wsdl Service1.wsdl TestClient_0004.composite TestCompositeSOAP.composite
Expected output	Positive test: “POL_4030 request service1 operation1 invoked”

POL_4031_TestCase

Testcase ID	POL_4031_TestCase
Test Assertion	POL-TA-40022 POL-TA-40037 POL-TA-40050
Description	Tests that where a <component/> has an <service/> element which has a <interface/> subelement with an intent attached to it, that the intent applies to the <component/> <service/> and must be satisfied by its binding.
Artifacts	POL_4031_TestCase.java Test_POL_4031.composite TestInvocation.wsdl TestClient_0004.composite Service1.wsdl Service1withSOAPIntent.wsdl TestComposite1.composite
Expected output	Positive test: “POL_4031 request service1 operation1 invoked”

POL_4032_TestCase

Testcase ID	POL_4032_TestCase
Test Assertion	POL-TA-40023 POL-TA-40038 POL TA 40050
Description	Tests that where a <component/> has an <reference/> element which has a <interface/> subelement with an intent attached to it, that the intent applies to the <component/> <reference/> and must be satisfied by its binding.
Artifacts	POL_4032_TestCase.java Test_POL_4032.composite TestInvocation.wsdl TestClient_0004.composite Service1.wsdl Service1withSOAPIntent.wsdl TestComposite1.composite
Expected output	Positive test: “POL_4032 request service1 operation1 invoked”

POL_4033_TestCase

Testcase ID	POL_4033_TestCase
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Test Assertion	POL-TA-40058
Description	Tests that the @attachTo attribute of an <externalAttachment/> element is a valid XPath 1.0 production expression
Artifacts	POL_4033_TestCase.java Test_POL_4033.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml in POL_4033 contribution
Expected output	Negative test: "exception"

2.3 Section 5

POL_5001_TestCase

Testcase ID	POL_5001_TestCase
Test Assertion	POL-TA-50001
Description	A testcase to verify that the runtime can detect unknown implementation types.
Artifacts	POL_5001_TestCase.java Test_POL_5001.composite TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: "exception"

2.4 Section 9

POL_9006_TestCase

Testcase ID	POL_9006_TestCase
Test Assertion	POL-TA-90009, POL-TA-90036
Description	A testcase to verify that a reference with transactedOneWay on a non-global tran component, results in an error from the runtime.
Artifacts	POL_9006_TestCase.java Test_POL_9006.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Negative test: "exception"

POL_9009_TestCase

Testcase ID	POL_9009_TestCase
Test Assertion	POL-TA-90012, POL-TA-90030

Description	A testcase to verify that a service with transactedOneWay on a non-global tran component, results in an error from the runtime.
Artifacts	POL_9009_TestCase.java Test_POL_9009.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Negative test: “exception”

POL_9015_TestCase

Testcase ID	POL_9015_TestCase
Test Assertion	POL-TA-90021
Description	A testcase to verify that a component with managedTransaction.local and a service with propagatesTransaction, results in an error from the runtime.
Artifacts	POL_9015_TestCase.java Test_POL_9015.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: “exception”

POL_9016_TestCase

Testcase ID	POL_9016_TestCase
Test Assertion	POL-TA-90022
Description	A testcase to verify that a component with noManagedTransaction and a service with propagatesTransaction, results in an error from the runtime.
Artifacts	POL_9016_TestCase.java Test_POL_9016.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite Service1.wsdl
Expected output	Negative test: “exception”

POL_9017_TestCase

Testcase ID	POL_9017_TestCase
Test Assertion	POL-TA-90025
Description	A testcase to verify that a reference with propagatesTransaction on a local tran component, results in an error from the runtime.
Artifacts	POL_9017_TestCase.java Test_POL_9017.composite

	TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Negative test: “exception”

POL_9018_TestCase

Testcase ID	POL_9018_TestCase
Test Assertion	POL-TA-90026
Description	A testcase to verify that a reference with propagatesTransaction on a no-ManagedTransaction component, results in an error from the runtime.
Artifacts	POL_9018_TestCase.java Test_POL_9018.composite TestInvocation.wsdl TestClient_0004.composite TestComposite1.composite TestComposite4.composite Service1.wsdl
Expected output	Negative test: “exception”

POL_9019_TestCase

Testcase ID	POL_9019_TestCase
Test Assertion	POL-TA-90031
Description	Tests that where a <component/> <implementation/> is marked with the intent managedTransaction.local that a reference of the component is not marked with the transactedOneWay intent
Artifacts	POL_9019_TestCase.java Test_POL_9019.composite TestInvocation.wsdl TestClient_0004.composite Service1.wsdl TestCompositeOneWayClient.composite TestCompositeOneWay.composite definitions.xml in POL_9019 contribution
Expected output	Negative test: “exception”

POL_9020_TestCase

Testcase ID	POL_9020_TestCase
Test Assertion	POL-TA-90032
Description	Tests that where the <interface/> of a reference involves request/response operations, that the <reference/> using that interface is not marked with the transactedOneWay intent
Artifacts	POL_9020_TestCase.java

	Test_POL_9020.composite TestInvocation.wSDL TestClient_0004.composite Service1.wSDL TestComposite1.composite TestComposite4.composite definitions.xml in POL_9020 contribution
Expected output	Negative test: “exception”

POL_9021_TestCase

Testcase ID	POL_9021_TestCase
Test Assertion	POL-TA-90033
Description	Tests that where the <interface/> of a reference involves request/response operations, that the <reference/> using that interface is not marked with the immediateOneWay intent
Artifacts	POL_9021_TestCase.java Test_POL_9021.composite TestInvocation.wSDL TestClient_0004.composite Service1.wSDL TestComposite1.composite TestComposite4.composite definitions.xml in POL_9021 contribution
Expected output	Negative test: “exception”

POL_9022_TestCase

Testcase ID	POL_9022_TestCase
Test Assertion	POL-TA-90034
Description	Tests that where a <component/> <reference/> is marked with the asyncIn- vocation intent it is not also marked with the propagatesTransaction intent
Artifacts	POL_9022_TestCase.java Test_POL_9022.composite TestInvocation.wSDL TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

POL_9023_TestCase

Testcase ID	POL_9023_TestCase
Test Assertion	POL-TA-90035
Description	Tests that where a <component/> <service/> is marked with the asyncIn- vocation intent it is not also marked with the propagatesTransaction intent
Artifacts	POL_9023_TestCase.java Test_POL_9023.composite

	TestInvocation.wsdl TestClient_0004.composite definitions.xml
Expected output	Negative test: “exception”

2.5 Section 10

POL_10001_TestCase

Testcase ID	POL_10001_TestCase
Test Assertion	POL-TA-100005
Description	A testcase to verify that the noListener intent is not used on a service.
Artifacts	POL_10001_TestCase.java Test_POL_10001.composite TestInvocation.wsdl TestClient_0004.composite
Expected output	Negative test: “exception”

2.6 Section 11

POL_11001_TestCase

Testcase ID	POL_11001_TestCase
Test Assertion	POL-TA-110001
Description	A testcase to verify that the runtime rejects a composite that does not conform to the Policy FW schema.
Artifacts	POL_11001_TestCase.java Test_POL_11001.composite TestInvocation.wsdl TestClient_0004.composite
Expected output	Negative test: “exception”

3 Catalog of Test Artifacts

3.1 Composite Files - lower level

Name	Valid	Description
TestClient_0004.composite	Y	Contains a service, property and optional reference that receives control from the test client.
TestComposite1.composite	Y	Contains a component that implements Service1.
TestComposite4.composite	Y	Contains a component that implements Service1 and has a reference to another component.
TestCompositeSOAP.composite	Y	Contains the use of the SCA defined SOAP intent.

3.2 Java Interfaces – General_Java contribution

Name	Description
Service1.java	Interface with one request/response operation called operation1

3.3 Java Implementation Classes - General_Java

Name	Description
ASM_0002_Client.java	Basic class that receives operation call from test client, and has one optional reference
Service1Impl.java	Implements Service1 by returning the value of the serviceName property on the component
Service1Impl2.java	Implements Service1 by passing the invocation on to its reference and then returning the value of the serviceName property on the component

3.4 WSDL Interface Files - General

Name	Description
Service1.wsdl	PortType with one request/response operation called operation1
TestInvocation.wsdl	PortType used to invoke a test application

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3.5 Policy files - General

Name	Description
General - definitions.xml	Contains a base set of policySets and intents that are used to test syntactic conformance statements

NOTE: Some testcase contributions also have a definitions.xml file. The existence of such a file usually indicates that it contains a statically checkable error.

4 Testcases Grouped by Capability

These three testcase groups can be found in the Test_Client contribution within the SCA Policy Testcases.

Testcase Group	Testcases
AllDirectAttachTests.java	POL_3001_TestCase, POL_3003_TestCase, POL_3004_TestCase, POL_3005_TestCase, POL_3006_TestCase, POL_3007_TestCase, POL_3008_TestCase, POL_3009_TestCase, POL_3011_TestCase, POL_3012_TestCase, POL_3013_TestCase, POL_3014_TestCase, POL_3015_TestCase, POL_3017_TestCase, POL_3018_TestCase, POL_3019_TestCase, POL_3020_TestCase, POL_4001_TestCase, POL_4002_TestCase, POL_4003_TestCase, POL_4004_TestCase, POL_4005_TestCase, POL_4006_TestCase, POL_4007_TestCase, POL_4008_TestCase, POL_4009_TestCase, POL_4012_TestCase, POL_4016_TestCase, POL_4018_TestCase, POL_4019_TestCase, POL_4020_TestCase, POL_4024_TestCase, POL_4027_TestCase, POL_4029_TestCase, POL_4030_TestCase, POL_4031_TestCase, POL_4032_TestCase, POL_4033_TestCase, POL_5001_TestCase, POL_9006_TestCase, POL_9009_TestCase, POL_9015_TestCase, POL_9016_TestCase, POL_9017_TestCase, POL_9018_TestCase, POL_9019_TestCase, POL_9020_TestCase, POL_9021_TestCase, POL_9022_TestCase, POL_9023_TestCase, POL_10001_TestCase, POL_11001_TestCase
AllExtAttachTests.java	POL_3001_TestCase, POL_3003_TestCase, POL_3004_TestCase, POL_3005_TestCase, POL_3006_TestCase, POL_3007_TestCase, POL_3008_TestCase, POL_3009_TestCase, POL_3011_TestCase, POL_3012_TestCase, POL_3013_TestCase, POL_3014_TestCase, POL_3015_TestCase, POL_3016_TestCase, POL_3017_TestCase, POL_3018_TestCase, POL_3019_TestCase, POL_3020_TestCase, POL_4001_TestCase, POL_4002_TestCase, POL_4003_TestCase, POL_4004_TestCase, POL_4005_TestCase, POL_4006_TestCase, POL_4007_TestCase, POL_4008_TestCase, POL_4009_TestCase, POL_4010_TestCase, POL_4012_TestCase, POL_4013_TestCase, POL_4015_TestCase, POL_4019_TestCase, POL_4020_TestCase, POL_4024_TestCase, POL_4027_TestCase, POL_4028_TestCase, POL_4029_TestCase, POL_4030_TestCase, POL_4031_TestCase, POL_4032_TestCase, POL_4033_TestCase, POL_5001_TestCase, POL_9006_TestCase, POL_9009_TestCase, POL_9015_TestCase, POL_9016_TestCase, POL_9017_TestCase, POL_9018_TestCase, POL_9019_TestCase, POL_9020_TestCase, POL_9021_TestCase, POL_9022_TestCase, POL_9023_TestCase, POL_10001_TestCase, POL_11001_TestCase
AllTests.java	POL_3001_TestCase, POL_3003_TestCase, POL_3004_TestCase, POL_3005_TestCase, POL_3006_TestCase, POL_3007_TestCase, POL_3008_TestCase, POL_3009_TestCase, POL_3011_TestCase, POL_3012_TestCase, POL_3013_TestCase, POL_3014_TestCase, POL_3015_TestCase, POL_3016_TestCase, POL_3017_TestCase, POL_3018_TestCase, POL_3019_TestCase, POL_3020_TestCase, POL_4001_TestCase, POL_4002_TestCase, POL_4003_TestCase, POL_4004_TestCase, POL_4005_TestCase, POL_4006_TestCase, POL_4007_TestCase, POL_4008_TestCase, POL_4009_TestCase,

	POL_4010_TestCase, POL_4012_TestCase, POL_4013_TestCase, POL_4018_TestCase, POL_4019_TestCase, POL_4020_TestCase, POL_4024_TestCase, POL_4027_TestCase, POL_4028_TestCase, POL_4029_TestCase, POL_4030_TestCase, POL_4031_TestCase, POL_4032_TestCase, POL_4033_TestCase, POL_5001_TestCase, POL_9006_TestCase, POL_9009_TestCase, POL_9015_TestCase, POL_9016_TestCase, POL_9017_TestCase, POL_9018_TestCase, POL_9019_TestCase, POL_9020_TestCase, POL_9021_TestCase, POL_9022_TestCase, POL_9023_TestCase, POL_10001_TestCase, POL_11001_TestCase
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5 Conformance

The artifacts contained in the sca-policy-1.1-testcases.zip file are considered to be authoritative and take precedence over the artifacts described in this document.

An implementation that claims to conform to this specification **MUST** be able to run all test cases in ***one*** of the 3 groups of test cases described in Section 4 "TestCases grouped by Capability", producing the 'Expected Output'.

Appendix A. Test Assertions for the SCA Policy Framework

This document defines Test Assertions for the SCA Policy specification:
<http://docs.oasis-open.org/opencsa/sca-policy/sca-policy-1.1.pdf>

The test assertions in this document follow the format defined in the OASIS Test Assertion Guidelines specification:
http://www.oasis-open.org/apps/group_public/download.php/30070/TestAssertionsGuidelines-draft-0-9-9-6.pdf

A.1 Example Test Assertion

Test assertions are presented in a tabular format with rows corresponding to the entry types defined in the OASIS Test Assertions Guidelines

Assertion ID	POL-TA-nnnnn [POLnnnnn]
Target	<xyuvbghs/> element of composite file
Prerequisites	The [<xyuvbghs/> element] has a @foobar attribute
Predicate	The @foobar attribute of [the <xyuvbghs/> element] is a URI that references a foobar element in the SCA Domain-
Prescription Level	Mandatory
Tags	foobar references

Assertion ID: Is a unique ID for the test assertion. Its format starts with a 3 letter string that identifies the specification to which it relates - "POL" is for the SCA Policy specification. This is followed by "-TA-" to indicate that this identifier is for a test assertion. This is then followed by a unique 4 digit number

Source: Is the identifier(s) of the normative statement(s) in the specification to which this assertion relates.

Target: Identifies the target which is addressed by this assertion. This is typically some SCA document element, but possibly could identify an SCA runtime and its behaviour.

Prerequisites: Defines any prerequisites for this test assertion. The prerequisites may be defined in terms of one or more other test assertions that must be true.

Predicate: The meat of the assertion - something that should evaluate to true or false for the given target.

Prescription Level: Mandatory (for MUST requirements) or Preferred (for SHOULD requirements) or Permitted (for MAY requirements).

Tags: Zero or more labels that may be attached to this test assertion - these tags can be used to group sets of assertions.

A.2 Test Assertions for SCA Policy Framework Section 3

Assertion ID	POL-TA-30001
Source	[POL30001]
Target	<binding/> element with @requires attribute containing one intent
Prerequisites	Configuration of the <binding/> conflicts with the intent
Predicate	SCA runtime raises an error
Prescription Level	Mandatory
Tags	"intents", "bindingInstance", "conflict"

Comment	Testing note: WS binding which points to a non-SOAP WSDL binding, where the reference/service @requires the SOAP intent.
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Assertion ID	POL-TA-30002
Source	[POL30001]
Target	<binding> element
Prerequisites	1) <binding/> element has a policySet either directly or externally attached. 2) Configuration of the <binding/> conflicts with the policySet
Predicate	SCA runtime raises an error
Prescription Level	Mandatory
Tags	"intents", "bindingInstance", "conflict"

Assertion ID	POL-TA-30003
Source	[POL30002]
Target	QName of <intent> element
Prerequisites	More than one <intent> elements are defined in the SCA Domain
Predicate	The QName of an <intent> element is unique amongst the set of all intents in the SCA domain
Prescription Level	Mandatory
Tags	"intent", "definitions.xml", "QName"

Assertion ID	POL-TA-30004
Source	[POL30004]
Target	The @default attribute of <qualifier> child elements of an <intent>
Prerequisites	<intent> element has more than one <qualifier> child elements
Predicate	Only one <qualifier> element for an <intent> has a @default attribute value of "true"
Prescription Level	Mandatory
Tags	"intent", "definitions.xml"

Assertion ID	POL-TA-30005
Source	[POL30005]
Target	The @name attribute of <qualifier> child element of an <intent>
Prerequisites	<intent> element has more than one <qualifier> child element
Predicate	The @name attribute of the qualifier is unique within all <qualifier> child elements for the <intent>
Prescription Level	Mandatory
Tags	"intent", "definitions.xml"

Assertion ID	POL-TA-30006
Source	[POL30006]
Target	The @name attribute of a profile intent
Prerequisites	
Predicate	The @name attribute of a profile <intent> does not contain a "." character
Prescription Level	Mandatory
Tags	"intent", "definitions.xml", "@name"

Assertion ID	POL-TA-30007
Source	[POL30007]
Target	SCDL element with a profile intent attached to it.
Prerequisites	
Predicate	Each intent required by the profile intent is satisfied.
Prescription Level	Mandatory
Tags	"profileIntent"

Assertion ID	POL-TA-30008
Source	[POL30008]
Target	@provides attribute of <intentMap/> subelement of a <policySet> element
Prerequisites	
Predicate	Value of the @provides attribute of the <intentMap> corresponds to an unqualified intent listed in the @provides attribute of the parent <policySet> element
Prescription Level	Mandatory
Tags	"policySet", "intentMap", "definitions.xml", "@provides"

Assertion ID	POL-TA-30010
Source	[POL30010]
Target	<policySet/> element that has a qualifiable intent listed in its @provides attribute
Prerequisites	
Predicate	<policySet/> contains at most one <intentMap/> subelement with a @provides attribute set to the the unqualified form of the qualifiable intent
Prescription Level	Mandatory
Tags	"policySet", "intentMap", "definitions.xml", "@provides"

Assertion ID	POL-TA-30011
Source	[POL30011]
Target	<policySet/> with policies defined using wsp:PolicyAttachment elements or extension elements
Prerequisites	<policySet/> has a @provides attribute containing one or more intents
Predicate	The set of policies specified by the child elements satisfies all the intents listed in the @provides attribute
Prescription Level	Mandatory
Tags	"policySet", "definitions.xml"

Assertion ID	POL-TA-30013
Source	[POL30013]
Target	<policySet/> containing a reference to a second <policySet> by means of a <policySetReference/>
Prerequisites	<policySet/> has a @provides attribute containing a first set of intents Referenced <policySet/> has a @provides attribute containing a second set of intents
Predicate	The second set of intents is a subset of the first set of intents
Prescription Level	Mandatory
Tags	"policySet", "definitions.xml", "@provides", "policySetReference"

Assertion ID	POL-TA-30015
Source	[POL30015]
Target	QName listed in the @requires attribute of an <intent> element
Prerequisites	
Predicate	QName is the QName of an intent in the SCA Domain.
Prescription Level	Mandatory
Tags	"intent", "definitions.xml", "@requires", "QNname"

Assertion ID	POL-TA-30016
Source	[POL30016]
Target	QName listed in the @excludes attribute of an <intent> element
Prerequisites	

Predicate	QName is the QName of an intent in the SCA Domain.
Prescription Level	Mandatory
Tags	"intent", "definitions.xml", "@excludes", "QName"

Assertion ID	POL-TA-30017
Source	[POL30017]
Target	The QName of <policySet> element
Prerequisites	More than one <policySet> element is defined in the SCA Domain
Predicate	QName of a <policySet> element is unique amongst all the <policySet> elements in the SCA Domain.
Prescription Level	Mandatory
Tags	"policySet", "definitions.xml"

Assertion ID	POL-TA-30018
Source	[POL30018]
Target	@appliesTo attribute of a <policySet> element
Prerequisites	
Predicate	The contents of the @appliesTo attribute is a valid XPath 1.0 production <i>expr</i> .
Prescription Level	Mandatory
Tags	"policySet", "definitions.xml", "@appliesTo", "XPath"

Assertion ID	POL-TA-30019
Source	[POL30019]
Target	@attachTo attribute of a <policySet> element
Prerequisites	
Predicate	The contents of the @attachTo attribute is a valid XPath 1.0 production <i>expr</i> .
Prescription Level	Mandatory
Tags	"policySet", "definitions.xml", "@attachTo", "XPath"

Assertion ID	POL-TA-30020
Source	[POL30020]
Target	<intentMap> child element of <policySet>
Prerequisites	<intentMap/> @provides attribute specifies a qualifiable intent
Predicate	<intentMap> element specifies all possible qualifiers for the qualified intent specified in the @provides attribute
Prescription Level	Mandatory
Tags	"policySet", "intentMap", "definitions.xml"

Assertion ID	POL-TA-30021
Source	[POL30021]
Target	<policySet/> element with an <intentMap/> subelement
Prerequisites	<intentMap/> element has an @provides attribute with one or more intent
Predicate	<policySet/> has an @provides attribute which contains all of the intents specified in the @provides attribute of the <intentMap/>
Prescription Level	Mandatory
Tags	"policySet", "intentMap", "definitions.xml", "@provides"

Assertion ID	POL-TA-30025
Source	[POL30024]
Target	SCA Domain

Prerequisites	
Predicate	The set of intent definitions contained in the Policy_Intents_Definitions.xml described in the Appendix “Intent Definitions” of the SCA Policy Framework specification are in the SCA Domain.
Prescription Level	Mandatory
Tags	“intent”, "Policy_Intents_Definitions.xml" "SCA Domain"

Assertion ID	POL-TA-30026
Source	[POL30025]
Target	<intent> element
Prerequisites	The qualifier is used as the default qualifier
Predicate	The qualifier definition has @default=true
Prescription Level	Mandatory
Tags	“intent”, “qualifier”

A.3 Test Assertions for SCA Policy Framework Section 4

Assertion ID	POL-TA-40001
Source	[POL40001,POL40010]
Target	SCDL Element
Prerequisites	a) An SCA implementation that supports both Direct Attachment and External Attachment mechanisms b) The SCDL element has a directly attached policySet c) There is a policySet using external attachment pointing to the same SCDL element
Predicate	The directly attached policySet is ignored and the externally attached policySet is applied
Prescription Level	Mandatory
Tags	“policySets”, “externalAttachment”, “directAttachment”

Assertion ID	POL-TA-40002
Source	[POL40001, POL40010]
Target	SCDL Element
Prerequisites	a) An SCA implementation that supports both Direct Attachment and External Attachment mechanisms b) The SCDL element has only a directly attached policySet
Predicate	The directly attached policySet is applied.
Prescription Level	Mandatory
Tags	“policySets”, “externalAttachment”, “directAttachment”

Assertion ID	POL-TA-40003
Source	[POL40001,POL40010]
Target	SCDL Element
Prerequisites	a) An SCA implementation that supports both Direct Attachment and External Attachment mechanisms b) There is only a policySet applied to the SCDL element using external attachment
Predicate	The externally attached policySet is applied.
Prescription Level	Mandatory
Tags	“policySets”, “externalAttachment”, “directAttachment”

Assertion ID	POL-TA-40004
Source	[POL40004]
Target	<component> element

Prerequisites	a) A qualifiable intent expressed lower in the implementation hierarchy b) A qualified intent expressed on the component
Predicate	The qualified intent applies to the component.
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “implementationHierarchy”

Assertion ID	POL-TA-40005
Source	[POL40004]
Target	<composite/> <service/> or <reference/> element which has a qualified intent expressed
Prerequisites	The unqualified form of the same qualifiable intent expressed on the <component/><service/> or <component/><reference/> element which is promoted by the <composite/><service/> or <composite/><reference/> element
Predicate	The qualified intent applies to the composite service or reference.
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “implementationHierarchy”

Assertion ID	POL-TA-40006
Source	[POL40005]
Target	SCDL element
Prerequisites	a) The element inherits a set of intents from higher in the structural hierarchy (S1) b) zero or more intents are applied directly to the element (S2) c) no intents in S1 are mutually exclusive to any intent in S2 d) the UNION of S1 and S2 does NOT contain qualified and unqualified forms of the same intent
Predicate	The UNION of the set of intents in S1 and S2 are applied to the element
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “structuralHierarchy”

Assertion ID	POL-TA-40007
Source	[POL40005]
Target	SCDL element
Prerequisites	a) The element inherits a set of intents from higher in the structural hierarchy (S1) b) one or more intents are applied directly to the element (S2) c) some intents in S2 are mutually exclusive to some intents in S1 d) the UNION of S1 and S2 does NOT contain qualified and unqualified forms of the same intent
Predicate	The intents in S2 and the intents from S1 that are NOT mutually exclusive with the intents in S2 are applied to the element
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “structuralHierarchy”
Comment	There could be more than one mutually exclusive intent (Same as V1)

Assertion ID	POL-TA-40008
Source	[POL40005]
Target	SCDL element
Prerequisites	a) The element inherits a set of intents from higher in the structural hierarchy (S1) b) zero or more intents are applied directly to the element (S2) c) no intents in S1 are mutually exclusive to any intent in S2 d) the UNION of S1 and S2 contains qualified and unqualified forms of the same intent (S3)
Predicate	All intents in S3 that are not the unqualified form of a qualifiable intent that is also in S3 are applied to the element
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “structuralHierarchy”

Comment	[POL40005] allows qualified intents from either source
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Assertion ID	POL-TA-40009
Source	[POL40006]
Target	<component> element
Prerequisites	a) A component has a policySet attached to it. b) The component's componentType has a policySet attached to it.
Predicate	The policySet attached to the componentType is ignored.
Prescription Level	Mandatory
Tags	"intent", "attachment", "componentType" "component"

Assertion ID	POL-TA-40010
Source	[POL40007]
Target	<reference> with a configured <binding> subelement
Prerequisites	a) A reference has a directly or externally attached policySet. b) The policySet uses WS-Policy syntax. c) The configured binding instance points to a service outside the SCA Domain. d) The target service is configured with WS-Policy based policies.
Predicate	WS-Policy compatibility of the reference with its target service is assessed using strict WS-Policy intersection.
Prescription Level	Mandatory
Tags	"policyMatching" "intersection" "WS-Policy" "reference"

Assertion ID	POL-TA-40011
Source	[POL40007]
Target	<service> with a configured <binding> subelement
Prerequisites	a) A service with directly or externally attached policySet. b) The policySet uses WS-Policy syntax. c) The configured binding instance enables access to clients outside the SCA Domain. d) An external client is configured with WS-Policy based policies.
Predicate	WS-Policy compatibility of the client with the service is assessed using strict WS-Policy intersection.
Prescription Level	Mandatory
Tags	policyMatching

Assertion ID	POL-TA-40012
Source	[POL40009]
Target	SCDL element with a set of 2 or more intents applied to it
Prerequisites	
Predicate	The intent set contains no pair of intents that are mutually exclusive.
Prescription Level	Mandatory
Tags	"policyMatching" "mutually exclusive" "intents"

Assertion ID	POL-TA-40013
Source	[POL40010, POL40011]
Target	SCDL Element with a directly attached policySet
Prerequisites	The SCA runtime only supports external attachment
Predicate	The directly attached policySet is ignored
Prescription Level	Mandatory
Tags	"policySet", "attachment", "externalAttachment"

Assertion ID	POL-TA-40014
Source	[POL40010, POL40011]
Target	SCDL Element with an externally attached policySet
Prerequisites	The SCA runtime only supports external attachment
Predicate	The externally attached policySet is applied
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “externalAttachment”

Assertion ID	POL-TA-40015
Source	[POL40010, POL40011]
Target	SCDL Element with a directly attached policySet and a different externally attached policySet
Prerequisites	The SCA runtime only supports external attachment
Predicate	The directly attached policySet is ignored and the externally attached policySet is applied.
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “externalAttachment”

Assertion ID	POL-TA-40016
Source	[POL40010, POL40012]
Target	SCDL Element with an externally attached policySet
Prerequisites	The SCA runtime only supports direct attachment
Predicate	The externally attached policySet is ignored.
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “directAttachment”

Assertion ID	POL-TA-40017
Source	[POL40010, POL40012]
Target	SCDL Element with a directly attached policySet
Prerequisites	The SCA runtime only supports direct attachment
Predicate	The directly attached policySet is applied.
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “directAttachment”

Assertion ID	POL-TA-40018
Source	[POL40010, POL40012]
Target	SCDL Element with a directly attached policySet and a different externally attached policySet
Prerequisites	The SCA runtime only supports direct attachment
Predicate	The externally attached policySet is ignored and the directly attached policySet is applied.
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “directAttachment”

Assertion ID	POL-TA-40020
Source	[POL40014]
Target	SCDL element with one or more elements below it in its implementation hierarchy
Prerequisites	An intent is applied to an element in the implementation hierarchy.
Predicate	The intent applies to the element
Prescription Level	Mandatory
Tags	“intent” “attachment”, “implementationHierarchy”

Assertion ID	POL-TA-40021
Source	[POL40015]

Target	SCDL Element
Prerequisites	a) Unqualified form of a qualifiable intent is attached to a SCDL element in the <component-Type/> of an implementation. b) Qualified form of the same qualifiable intent is attached to the corresponding element in a component implemented by the implementation.
Predicate	The qualified intent applies to the child elements of the SCDL Element
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “implementationHierarchy”, “structural hierarchy”

Assertion ID	POL-TA-40022
Source	[POL40016]
Target	Component service
Prerequisites	a) service uses an interface with one or more intents attached or an <interface> element with one or more intents attached. b) a binding that is configured for the service
Predicate	Intents attached to interface apply to the service and to the binding.
Prescription Level	Mandatory
Tags	“intent” “attachment”, “interface”, “binding”

Assertion ID	POL-TA-40023
Source	[POL40016]
Target	Component reference
Prerequisites	a) reference uses an interface with one or more intents attached or an <interface> element with one or more intents attached. b) a binding that is configured for the reference
Predicate	Intents attached to interface apply to the reference and to the binding.
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “interface”, “binding”

Assertion ID	POL-TA-40024
Source	[POL40016]
Target	Component service
Prerequisites	a) service uses an interface with one or more policySets attached or an <interface> element with one or more policySets attached. b) a binding that is configured for the service
Predicate	policySets attached to interface apply to the service and the binding.
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “interface”, “binding”

Assertion ID	POL-TA-40025
Source	[POL40016]
Target	Component reference
Prerequisites	a) reference uses an interface with one or more policySets attached or an <interface> element with one or more policySets attached. b) a binding that is configured for the reference
Predicate	policySets attached to interface apply to the reference and to the binding.
Prescription Level	Mandatory
Tags	“policySet”, “attachment”, “interface”, “binding”

Assertion ID	POL-TA-40026
Source	[POL40017]
Target	Composite document

Prerequisites	Required intent set for an element in the composite contains a pair of mutually exclusive intents.
Predicate	Composite document is rejected and the SCA runtime raises an error
Prescription Level	Mandatory
Tags	"intent" "attachment" "mutually exclusive"

Assertion ID	POL-TA-40027
Source	[POL40018]
Target	Component Service
Prerequisites	a) service has one or more intents in its required intent set b) zero or more bindings (SCA binding is used if no others are configured) c) zero or more policySets (attached directly and/or externally)
Predicate	All the intents in the required intent set are provided by the set of bindings and policySets which apply to the service.
Prescription Level	Mandatory
Tags	"intent" "policySets", "service", "binding"

Assertion ID	POL-TA-40028
Source	[POL40018]
Target	Component Reference
Prerequisites	a) reference has one or more intents in its required intent set b) zero or more bindings c) zero or more policySets (attached directly and/or externally)
Predicate	All the intents in the required intent set are provided by the set of bindings and policySets which apply to the reference.
Prescription Level	Mandatory
Tags	"intent" "policySets", "reference", "binding"

Assertion ID	POL-TA-40036
Source	[POL40018]
Target	Component implementation
Prerequisites	a) implementation has one or more intents in its required intent set b) zero or more intents are provided by the implementationType c) zero or more policySets (attached directly and/or externally)
Predicate	All the intents in the required intent set are provided by the combination of the implementationType and any policySets which apply to the implementation.
Prescription Level	Mandatory
Tags	"intent" "policySets", "reference", "binding"

Assertion ID	POL-TA-40037
Source	[POL40019]
Target	<component/> <service/>
Prerequisites	a) <component/> has <implementation/> which has an <interface/> attached to the <service/> corresponding to the <component> <service/> b) <interface/> has an intent applied to it, either in the @requires attribute of the <interface/> element or in the declaration of the interface artifact
Predicate	The intent applies to the <component/> <service/>
Prescription Level	Mandatory
Tags	"intent" "", "attachment", "interface", "service"

Assertion ID	POL-TA-40038
Source	[POL40019]

Target	<component/> <reference/>
Prerequisites	a) <component/> has <implementation/> which has an <interface/> attached to the <reference/> corresponding to the <component> <reference/> b) <interface/> has an intent applied to it, either in the @requires attribute of the <interface/> element or in the declaration of the interface artifact
Predicate	The intent applies to the <component/> <reference/>
Prescription Level	Mandatory
Tags	“intent” “”, “attachment”, “interface”, “reference”

Assertion ID	POL-TA-40039
Source	[POL40020]
Target	QName of bindingType element
Prerequisites	More than one bindingType is defined in the SCA Domain
Predicate	The QName of the bindingType is unique amongst the set of bindingTypes in the SCA Domain.
Prescription Level	Mandatory
Tags	“bindingType”

Assertion ID	POL-TA-40040
Source	[POL40021]
Target	Binding implementation
Prerequisites	a) the associated bindingType has one or more intents listed in the @alwaysProvides attribute b) the associated bindingType has one or more intents listed in the @mayProvides attribute
Predicate	The binding implementation implements all the intents listed in its @alwaysProvides and @mayProvides attributes.
Prescription Level	Mandatory
Tags	“intent”, “alwaysProvides”, “mayProvides”, “bindingType”

Assertion ID	POL-TA-40041
Source	[POL40022, POL40025]
Target	A reference that is connected to a service (i.e. a wire)
Prerequisites	a) one or more policySets (using policy language X) applied to the reference b) one or more policySets (using policy language X) applied to the service
Predicate	The wire is valid if the policySets at each end of the wire are compatible, using the compatibility rules of policy language X.
Prescription Level	Mandatory
Tags	“policySets” “compatibility”

Assertion ID	POL-TA-40042
Source	[POL40023, POL40025]
Target	A reference that is connected to a service (i.e. a wire)
Prerequisites	a) one or more policySets (using policy language X) applied to the reference b) one or more policySets (using policy language Y) applied to the service
Predicate	The wire is not valid.
Prescription Level	Mandatory
Tags	“policySets” “compatibility”

Assertion ID	POL-TA-40043
Source	[POL40024, POL40025]
Target	A reference that is connected to a service (i.e. a wire)
Prerequisites	a) one or more policySets (using WS-Policy language) applied to the reference b) one or more policySets (using WS-Policy language) applied to the service
Predicate	Wire is valid if the policySets are compatible using WS-Policy strict intersection.

Prescription Level	Mandatory
Tags	“policySet”, “compatibility”, “WS-Policy”

Assertion ID	POL-TA-40049
Source	[POL40002]
Target	<policySet> element with @attachTo attribute
Prerequisites	a) A component with a <property> element b) The policySet is deployed to the SCA Domain c) The component is deployed to the SCA Domain
Predicate	The @attachTo attribute does not resolve to the component property
Prescription Level	Mandatory
Tags	“policySet”, “attachment”

Assertion ID	POL-TA-40050
Source	[POL40027]
Target	The required intent set for a component service or reference
Prerequisites	The service or reference interface definition contains attached intents
Predicate	The required intent set for the service or reference contains the intents from the interface definition
Prescription Level	Mandatory
Tags	“intent”, “attachment”, “interface”

Assertion ID	POL-TA-40057
Source	[POL40034]
Target	Component service
Prerequisites	0*Component is contained within a composite which is deployed into the SCA Domain 1*Component service has no directly attached intents 2*SCA Domain already contains an <externalAttachment/> element which references an intent and which has an @attachTo attribute which includes the component service as one of the places to which it attaches the intent 3*Component service has no directly attached policySets 4*SCA Domain already contains a policySet with an @attachTo attribute which targets component services which have the intent referenced by the <externalAttachment/> element
Predicate	The component service runs with the policies present in the policySet
Prescription Level	Mandatory
Tags	“intent”, “policySet”, “attachment”, “externalAttachment”, “domain”

Assertion ID	POL-TA-40058
Source	[POL40035]
Target	@attachTo attribute of a <externalAttachment> element
Prerequisites	
Predicate	The contents of the @attachTo attribute is a valid XPath 1.0 production <i>expr</i> .
Prescription Level	Mandatory
Tags	“externalAttachment”, “definitions.xml”, "@attachTo", "XPath"

A.4 Test Assertions for SCA Policy Framework Section 5

Assertion ID	POL-TA-50001
Source	[POL50001]
Target	<implementationType/> @name attribute
Prerequisites	
Predicate	@name attribute value of the implementationType element is the QName of an XSD global ele-

	ment for <implementation.xxx> elements. .
Prescription Level	Mandatory
Tags	“implementationType”

A.5 Test Assertions for SCA Policy Framework Section 7

Assertion ID	POL-TA-70001
Source	[POL70001]
Target	SCA Runtime
Prerequisites	<i>authorization</i> intent is present on a wire.
Predicate	An authorization check is made during invocation of the service.
Prescription Level	Mandatory
Tags	“authorization”, “intent”

Assertion ID	POL-TA-70002
Source	[POL70009]
Target	SCA Runtime
Prerequisites	<i>confidentiality</i> intent is present on a wire.
Predicate	Messages exchanged over the wire are only viewable the two parties that make up the wire.
Prescription Level	Mandatory
Tags	“confidentiality”, “intent”

Assertion ID	POL-TA-70003
Source	[POL70010]
Target	SCA Runtime
Prerequisites	<i>integrity</i> intent is present on a wire.
Predicate	Messages exchanged over the wire are not altered by a third party.
Prescription Level	Mandatory
Tags	“integrity”, “intent”

Assertion ID	POL-TA-70004
Source	[POL70011]
Target	SCA Runtime
Prerequisites	a) A <i>serverAuthentication</i> , <i>clientAuthentication</i> , <i>confidentiality</i> . or <i>integrity</i> intent is present on a wire. b) The intent is qualified by <i>transport</i> .
Predicate	The SCA runtime delegates the corresponding functionality to the transport layer of the communications protocol.
Prescription Level	Mandatory
Tags	“authentication”, “confidentiality”, “integrity”, “intent”

Assertion ID	POL-TA-70005
Source	[POL70012]
Target	SCA Runtime
Prerequisites	a) A <i>serverAuthentication</i> , <i>clientAuthentication</i> , <i>confidentiality</i> . or <i>integrity</i> intent is present on a wire. b) The intent is qualified by <i>message</i> .
Predicate	The SCA runtime delegates the corresponding functionality to the message layer of the communications protocol.
Prescription Level	Mandatory
Tags	“authentication”, “confidentiality”, “integrity”, “intent”

Assertion ID	POL-TA-70006
Source	[POL70013]
Target	SCA Runtime
Prerequisites	The <i>serverAuthentication</i> intent is present on a wire.
Predicate	The SCA runtime authenticates the server to the client.
Prescription Level	Mandatory
Tags	“authentication”, “intent”

Assertion ID	POL-TA-70007
Source	[POL70014]
Target	SCA Runtime
Prerequisites	The <i>clientAuthentication</i> intent is present on a wire.
Predicate	The SCA runtime authenticates the client to the server.
Prescription Level	Mandatory
Tags	“authentication”, “intent”

A.6 Test Assertions for SCA Policy Framework Section 8

Assertion ID	POL-TA-80001
Source	[POL80001]
Target	SCA Runtime
Prerequisites	The <i>atLeastOnce</i> intent is present on a wire.
Predicate	The SCA runtime delivers at least one copy of the message to the destination service implementation.
Prescription Level	Mandatory
Tags	“atLeastOnce”, “intent”

Assertion ID	POL-TA-80002
Source	[POL80002]
Target	SCA Runtime
Prerequisites	The <i>atMostOnce</i> intent is present on a wire.
Predicate	The SCA runtime delivers at most one copy of the message to the destination service implementation.
Prescription Level	Mandatory
Tags	“atMostOnce”, “intent”

Assertion ID	POL-TA-80003
Source	[POL80003]
Target	SCA Runtime
Prerequisites	The <i>ordered</i> intent is present on a wire.
Predicate	The SCA runtime delivers messages sent by each client to the service in the order that the messages were sent by the client.
Prescription Level	Mandatory
Tags	“ordered”, “intent”

Assertion ID	POL-TA-80004
Source	[POL80004]
Target	SCA Runtime
Prerequisites	The <i>exactlyOnce</i> intent is present on a wire.
Predicate	The SCA runtime delivers one and only one copy of the message to the destination service implementation.

Prescription Level	Mandatory
Tags	“exactlyOnce”, “intent”

A.7 Test Assertions for SCA Policy Framework Section 9

Assertion ID	POL-TA-90003
Source	[POL90003]
Target	Implementation of a component marked with <i>managedTransaction.global</i> intent.
Prerequisites	
Predicate	The implementation runs in a global transaction.
Prescription Level	Mandatory
Tags	“managedTransaction.global”, “intent”

Assertion ID	POL-TA-90004
Source	[POL90004]
Target	Implementation of a component marked with <i>managedTransaction.local</i> intent.
Prerequisites	
Predicate	The implementation runs in a local transaction.
Prescription Level	Mandatory
Tags	“managedTransaction.local”, “intent”, “transactionContext”

Assertion ID	POL-TA-90006
Source	[POL90006]
Target	A component marked with <i>managedTransaction.local</i> intent.
Prerequisites	The component invokes a remotable service.
Predicate	Local transaction context is not propagated to the remotable service.
Prescription Level	Mandatory
Tags	“localTransaction”, “intent”, “transactionContext”

Assertion ID	POL-TA-90007
Source	[POL90007]
Target	Implementation of a component marked with <i>noManagedTransaction</i> intent.
Prerequisites	a) A service of the component is invoked by a client. b) A transaction is propagated from the client with the service invocation.
Predicate	The component is not executed under the propagated transaction.
Prescription Level	Mandatory
Tags	“noManagedTransaction”, “intent”, “transactionContext”
Comment	The client for a test based on this test assertion is going to have to be a non-SCA client since the combination of "propagatesTransaction" and "noManagedTransaction" would result in an error in an SCA composite which attempted to model the interaction implied by this assertion.

Assertion ID	POL-TA-90008
Source	[POL90008]
Target	Component implementation with a reference with <i>@requires="transactedOneWay"</i> .
Prerequisites	a) Component runs under a global transaction. c) Reference is wired to Component B using a transaction aware binding that supports the <i>transactedOneWay</i> intent. d) Component invokes the reference using a one-way operation. e) Component A rolls back its transaction.
Predicate	Component B is not invoked.
Prescription Level	Mandatory
Tags	“transactedOneWay”, “intent”

Assertion ID	POL-TA-90009
Source	[POL90009]
Target	<reference/> of component that is not configured to run under a global transaction.
Prerequisites	
Predicate	Reference is not marked with the <i>transactedOneWay</i> intent.
Prescription Level	Mandatory
Tags	"transactedOneWay", "intent" "reference"

Assertion ID	POL-TA-90010
Source	[POL90009]
Target	<reference/> of component with a binding that does not support transactional message sending
Prerequisites	
Predicate	Rreference is not marked with the <i>transactedOneWay</i> intent.
Prescription Level	Mandatory
Tags	"transactedOneWay", "intent"

Assertion ID	POL-TA-90011
Source	[POL90010]
Target	Component with a <service/> marked with @requires="transactedOneWay".
Prerequisites	a) Component runs under a global transaction. c) Client component is wired to the component using a transaction aware binding that supports the transactedOneWay intent. d) Client component invokes the component via a one-way operation. e) Client component rolls back its transaction.
Predicate	The component is not invoked.
Prescription Level	Mandatory
Tags	"transactedOneWay", "intent", "transactionContext"

Assertion ID	POL-TA-90012
Source	[POL90011]
Target	<service/> of component that is not configured to run under a global transaction.
Prerequisites	
Predicate	service is not marked with the <i>transactedOneWay</i> intent.
Prescription Level	Mandatory
Tags	"transactedOneWay", "intent"

Assertion ID	POL-TA-90013
Source	[POL90011]
Target	<service/> of component that has a <binding/> that does not support transactional message sending
Prerequisites	
Predicate	service is not marked with the <i>transactedOneWay</i> intent.
Prescription Level	Mandatory
Tags	"transactedOneWay", "intent"

Assertion ID	POL-TA-90016
Source	[POL90012]
Target	Component <reference/> with @requires="immediateOneWay"
Prerequisites	a) Component runs under a global transaction

	c) <reference/> is wired to target service using a transaction aware binding that supports the immediateOneWay intent d) Component invokes the reference via a one-way operation e) Component rolls back its transaction
Predicate	Target service is invoked once and only once
Prescription Level	Mandatory
Tags	"immediateOneWay", "intent"

Assertion ID	POL-TA-90017
Source	[POL90013]
Target	Component <service/> with @requires="immediateOneWay"
Prerequisites	a) Client is wired to the <service/> using a transaction aware binding that supports the immediateOneWay intent b) Client runs under a global transaction d) Client invokes the <service/> via a one-way operation e) Client rolls back its transaction
Predicate	<service/> is invoked once and only once
Prescription Level	Mandatory
Tags	"immediateOneWay", "intent" "rollback"

Assertion ID	POL-TA-90018
Source	[POL90015, POL90016, POL90020]
Target	Component <service/> marked with @requires="propagatesTransaction"
Prerequisites	a) Client component has a reference with @requires="propagatesTransaction" b) Client component runs under a global transaction c) Client component is wired to the <service/> using a transaction aware binding that supports the propagatesTransaction intent d) Client component invokes the <service/> via a request/response operation
Predicate	<service/> operation runs under the client component's transaction.
Prescription Level	Mandatory
Tags	"propagatesTransaction", "intent", "transactionContext"

Assertion ID	POL-TA-90020
Source	[POL90017, POL90022]
Target	Component <service/> marked with @requires="suspendsTransaction"
Prerequisites	a) Client component has a reference with @requires="suspendsTransaction" b) Client component runs under a global transaction c) Client component is wired to <service/> using a transaction aware binding that supports the suspendsTransaction intent d) Client component invokes <service/> via a request/response operation
Predicate	<service/> operation does not run under client component's transaction.
Prescription Level	Mandatory
Tags	"suspendsTransaction", "intent", "transactionContext"

Assertion ID	POL-TA-90021
Source	[POL90019]
Target	Component <service/>
Prerequisites	Component is marked with the <i>managedTransaction.local</i> intent
Predicate	<service/> is not marked with the <i>propagatesTransaction</i> intent
Prescription Level	Mandatory
Tags	"propagatesTransaction", "managedTransaction.local", "intent"

Assertion ID	POL-TA-90022
Source	[POL90019]
Target	Component <service/>
Prerequisites	Component is marked with the <i>noManagedTransaction</i> intent
Predicate	<service/> is not marked with the <i>propagatesTransaction</i> intent
Prescription Level	Mandatory
Tags	“propagatesTransaction”, “noManagedTransaction”, “intent”

Assertion ID	POL-TA-90025
Source	[POL90023]
Target	Component <reference/>
Prerequisites	Component is marked with the <i>managedTransaction.local</i> intent
Predicate	<reference/> is not marked with the <i>propagatesTransaction</i> intent
Prescription Level	Mandatory
Tags	“propagatesTransaction”, “managedTransaction.local”, ”, “intent”

Assertion ID	POL-TA-90026
Source	[POL90023]
Target	Component <reference/>
Prerequisites	Component is marked with the <i>noManagedTransaction</i> intent
Predicate	<reference/> is not marked with the <i>propagatesTransaction</i> intent
Prescription Level	Mandatory
Tags	“propagatesTransaction”, “noManagedTransaction”, “intent”

Assertion ID	POL-TA-90027
Source	[POL90024]
Target	Component reference with a one-way operation
Prerequisites	a) Component is marked to run under a transaction b) Component invokes a method of the reference marked @OneWay
Predicate	Transaction context is not propagated with the message sent from the reference
Prescription Level	Mandatory
Tags	“transactionContext”, “intent”

Assertion ID	POL-TA-90028
Source	[POL90025]
Target	Component reference with a one-way operation and also marked with <i>propagatesTransaction</i> intent.
Prerequisites	a) Component is marked to run under a transaction b) Component implementation invokes a method of the reference marked @OneWay
Predicate	Transaction context is not propagated with the message sent from the reference
Prescription Level	Mandatory
Tags	“propagatesTransaction”, “intent”

Assertion ID	POL-TA-90030
Source	[POL90027]
Target	<component/> <service/>
Prerequisites	<component/> <implementation/> marked with <i>managedTransaction.local</i> intent
Predicate	<service/> is not marked with the <i>transactedOneWay</i> intent
Prescription Level	Mandatory

Tags	“transactedOneWay”, “managedTransaction.local”, “intent”
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Assertion ID	POL-TA-90031
Source	[POL90027]
Target	<component/> <reference/>
Prerequisites	<component/> <implementation/> marked with <i>managedTransaction.local</i> intent
Predicate	<reference/> is not marked with the <i>transactedOneWay</i> intent
Prescription Level	Mandatory
Tags	“transactedOneWay”, “noManagedTransaction”, “intent”

Assertion ID	POL-TA-90032
Source	[POL90028]
Target	<component/> <interface/operation>
Prerequisites	<component/> <interface/operation> is a request-response operation
Predicate	<interface/operation> is not marked with the <i>transactedOneWay</i> intent.
Prescription Level	Mandatory
Tags	“transactedOneWay”, “intent”

Assertion ID	POL-TA-90033
Source	[POL90029]
Target	<component/> <interface/operation>
Prerequisites	<component/> <interface/operation> is a request-response operation
Predicate	<interface/operation> is not marked with the <i>immediateOneWay</i> intent.
Prescription Level	Mandatory
Tags	“immediateOneWay”, “intent”

Assertion ID	POL-TA-90034
Source	[POL90030]
Target	<component/> <reference/>
Prerequisites	<component/> <reference/> marked with the <i>asynchInvocation</i> intent
Predicate	<component/> <reference/> is not marked with the <i>propagatesTransaction</i> intent
Prescription Level	Mandatory
Tags	“asynchInvocation”, “propagatesTransaction”, “intent”

Assertion ID	POL-TA-90035
Source	[POL90030]
Target	<component/> <service/>
Prerequisites	<component/> <service/> marked with the <i>asynchInvocation</i> intent
Predicate	<component/> <service/> is not marked with the <i>propagatesTransaction</i> intent
Prescription Level	Mandatory
Tags	“asynchInvocation”, “propagatesTransaction”, “intent”

Assertion ID	POL-TA-90036
Source	[POL90031]
Target	<component/> <service/> marked with <i>asynchInvocation</i> intent
Prerequisites	<ul style="list-style-type: none"> a) Client component has a reference with @requires=“propagatesTransaction” b) Client component runs under a global transaction c) Client component is wired to <service/> using a transaction aware binding that supports the propagatesTransaction intent d) Client component invokes <service/> via a request/response operation

Predicate	<service/> behaves as if it were marked with the <i>suspendsTransaction</i> intent
Prescription Level	Mandatory
Tags	“asynchInvocation”, “intent”

A.8 Test Assertions for SCA Policy Framework Section 10

Assertion ID	POL-TA-100001
Source	[POL100001]
Target	<i>SOAP</i> intent on a service and the reference it is wired to.
Prerequisites	
Predicate	The SCA runtime uses the <i>SOAP</i> messaging model to deliver messages
Prescription Level	Mandatory
Tags	“SOAP”, “intent”

Assertion ID	POL-TA-100002
Source	[POL100002]
Target	<i>SOAP.v1_1</i> intent on a service and the reference it is wired to.
Prerequisites	
Predicate	The SCA runtime uses the <i>SOAP.v1_1</i> messaging model to deliver messages
Prescription Level	Mandatory
Tags	“SOAP.v1_1”, “intent”

Assertion ID	POL-TA-100003
Source	[POL100002]
Target	<i>SOAP.v1_2</i> intent on a service and the reference it is wired to.
Prerequisites	
Predicate	The SCA runtime uses the <i>SOAP.v1_2</i> messaging model to deliver messages
Prescription Level	Mandatory
Tags	“SOAP.v1_2”, “intent”

Assertion ID	POL-TA-100004
Source	[POL100003]
Target	<i>JMS</i> intent on a service and the reference it is wired to.
Prerequisites	
Predicate	The SCA runtime ensures that the binding used to send and receive messages supports the <i>JMS</i> API.
Prescription Level	Mandatory
Tags	“JMS”, “intent”

Assertion ID	POL-TA-100005
Source	[POL100004]
Target	<component/> <service/>
Prerequisites	
Predicate	<service/> does not have the <i>noListener</i> intent applied to it
Prescription Level	Mandatory
Tags	“noListener”, “intent”

Assertion ID	POL-TA-100006
Source	[POL100005]
Target	<component/> <reference/> marked with <i>noListener</i> intent
Prerequisites	- <reference> has a callback interface

Predicate	No connection is created from the service to a client
Prescription Level	Mandatory
Tags	“noListener”, “intent”

Assertion ID	POL-TA-100007
Source	[POL100006]
Target	<component/> <service> marked with EJB intent
Prerequisites	- EJB client that can invoke the <service>
Predicate	The service is invoked using the EJB API.
Prescription Level	Mandatory
Tags	“EJB”, “intent”

Assertion ID	POL-TA-100008
Source	[POL100007]
Target	<component/> <reference> marked with EJB intent
Prerequisites	- EJB that can be invoked by the <reference>
Predicate	The <reference> is used to invoke the EJB.
Prescription Level	Mandatory
Tags	“EJB”, “intent”

A.9 Test Assertions for SCA Policy Framework Section 11

Assertion ID	POL-TA-110001
Source	[POL110001]
Target	A composite file
Prerequisites	composite file does not conform to sca-policy-1.1.xsd schema
Predicate	SCA runtime rejects the composite file and raises an error.
Prescription Level	Mandatory
Tags	“xmlSchema”, “schemaConformance”

Appendix B. Cross Mapping of Normative Statements to Test Assertions

Conformance statement	Test Assertion
POL30001	POL-TA-30001 POL-TA-30002
POL30002	POL-TA-30003
POL30004	POL-TA-30004
POL30005	POL-TA-30005
POL30006	POL-TA-30006
POL30007	POL-TA-30007
POL30008	POL-TA-30008
POL30010	POL-TA-30010
POL30011	POL-TA-30011
POL30013	POL-TA-30013
POL30015	POL-TA-30015
POL30016	POL-TA-30016
POL30017	POL-TA-30017
POL30018	POL-TA-30018
POL30019	POL-TA-30019
POL30020	POL-TA-30020
POL30021	POL-TA-30021
POL30024	POL-TA-30025
POL30025	POL-TA-30026
POL40001	POL-TA-40001 POL-TA-40002 POL-TA-40003
POL40002	POL-TA-40049
POL40004	POL-TA-40004 POL-TA-40005
POL40005	POL-TA-40006 POL-TA-40007 POL-TA-40008
POL40006	POL-TA-40009
POL40007	POL-TA-40010 POL-TA-40011
POL40009	POL-TA-40012
POL40010	POL-TA-40001 POL-TA-40002 POL-TA-40003 POL-TA-40013 POL-TA-40014 POL-TA-40015 POL-TA-40016 POL-TA-40017 POL-TA-40018

Conformance statement	Test Assertion
POL40011	POL-TA-40013 POL-TA-40014 POL-TA-40015
POL40012	POL-TA-40016 POL-TA-40017 POL-TA-40018
POL40014	POL-TA-40020
POL40015	POL-TA-40021
POL40016	POL-TA-40022 POL-TA-40023 POL-TA-40024 POL-TA-40025
POL40017	POL-TA-40026
POL40018	POL-TA-40027 POL-TA-40028 POL-TA-40036
POL40019	POL-TA-40037 POL-TA-40038
POL40020	POL-TA-40039
POL40021	POL-TA-40040
POL40022	POL-TA-40041
POL40023	POL-TA-40042
POL40024	POL-TA-40043
POL40025	POL-TA-40041 POL-TA-40042 POL-TA-40043
POL40027	POL-TA-40050
POL40034	POL-TA-40057
POL40035	POL-TA-40058
POL50001	POL-TA-50001
POL70001	POL-TA-70001
POL70009	POL-TA-70002
POL70010	POL-TA-70003
POL70011	POL-TA-70004
POL70012	POL-TA-70005
POL70013	POL-TA-70006
POL70014	POL-TA-70007
POL80001	POL-TA-80001
POL80002	POL-TA-80002
POL80003	POL-TA-80003
POL80004	POL-TA-80004
POL90003	POL-TA-90003
POL90004	POL-TA-90004
POL90006	POL-TA-90006
POL90007	POL-TA-90007
POL90008	POL-TA-90008
POL90009	POL-TA-90009 POL-TA-90010
POL90010	POL-TA-90011

Conformance statement	Test Assertion
POL90011	POL-TA-90012 POL-TA-90013
POL90012	POL-TA-90016
POL90013	POL-TA-90017
POL90015	POL-TA-90018
POL90016	POL-TA-90018
POL90017	POL-TA-90020
POL90019	POL-TA-90021 POL-TA-90022
POL90020	POL-TA-90018
POL90022	POL-TA-90020
POL90023	POL-TA-90025 POL-TA-90026
POL90024	POL-TA-90027
POL90025	POL-TA-90028
POL90027	POL-TA-90030 POL-TA-90031
POL90028	POL-TA-90032
POL90029	POL-TA-90033
POL90030	POL-TA-90034 POL-TA-90035
POL90031	POL-TA-90036
POL100001	POL-TA-100001
POL100002	POL-TA-100002 POL-TA-100003
POL100003	POL-TA-100004
POL100004	POL-TA-100005
POL100005	POL-TA-100006
POL100006	POL-TA-100007
POL100007	POL-TA-100008
POL110001	POL-TA-110001

Appendix C. Cross Mapping of Test Assertions to TestCases

Test Assertion	Test Cases
POL-TA-30001	POL_3001_TestCase
POL-TA-30002	Untestable - requires policySets written using a specific policy language - none is mandatory
POL-TA-30003	POL_3003_TestCase
POL-TA-30004	POL_3004_TestCase
POL-TA-30005	POL_3005_TestCase
POL-TA-30006	POL_3006_TestCase
POL-TA-30007	POL_3007_TestCase
POL-TA-30008	POL_3008_TestCase
POL-TA-30010	POL_3009_TestCase
POL-TA-30011	Untestable - WS-Policy not required to be supported
POL-TA-30013	POL_3011_TestCase
POL-TA-30015	POL_3007_TestCase POL_3012_TestCase
POL-TA-30016	POL_3013_TestCase
POL-TA-30017	POL_3011_TestCase POL_3014_TestCase
POL-TA-30018	POL_3011_TestCase POL_3015_TestCase
POL-TA-30019	POL_3016_TestCase
POL-TA-30020	POL_3017_TestCase POL_4002_TestCase
POL-TA-30021	POL_3018_TestCase POL_4002_TestCase
POL-TA-30025	POL_3019_TestCase
POL-TA-30026	POL_3020_TestCase

Test Assertion	Test Cases
POL-TA-40001	POL_4001_TestCase
POL-TA-40002	POL_4002_TestCase
POL-TA-40003	POL_4003_TestCase
POL-TA-40004	POL_4004_TestCase
POL-TA-40005	POL_4005_TestCase
POL-TA-40006	POL_4006_TestCase
POL-TA-40007	POL_4007_TestCase
POL-TA-40008	POL_4008_TestCase
POL-TA-40009	POL_4009_TestCase
POL-TA-40010	Untestable - WS-Policy not required to be supported

POL-TA-40011	Untestable - WS-Policy not required to be supported
POL-TA-40012	POL_4012_TestCase
POL-TA-40013	POL_4015_TestCase
POL-TA-40014	POL_4013_TestCase
POL-TA-40015	POL_4010_TestCase
POL-TA-40016	POL_4016_TestCase
POL-TA-40017	POL_3007_TestCase
POL-TA-40018	POL_4018_TestCase
POL-TA-40020	POL_4029_TestCase
POL-TA-40021	POL_4030_TestCase
POL-TA-40022	POL_4031_TestCase
POL-TA-40023	POL_4032_TestCase
POL-TA-40024	POL_4019_TestCase
POL-TA-40025	POL_4020_TestCase
POL-TA-40026	POL_4012_TestCase
POL-TA-40027	POL_4024_TestCase – delete? TA is preferred
POL-TA-40028	POL_4024_TestCase – delete? TA is preferred
POL-TA-40036	POL_3007_TestCase – delete? TA is preferred
POL-TA-40037	POL_4031_TestCase
POL-TA-40038	POL_4032_TestCase
POL-TA-40039	POL_4027_TestCase
POL-TA-40040	Untestable – no required binding available that meets the prerequisites of the test assertion.
POL-TA-40041	Untestable - requires policySets written using a specific policy language - none is mandatory.
POL-TA-40042	Untestable - requires policySets written using 2 specific policy language - none is mandatory.
POL-TA-40043	Untestable - requires support for WS-Policy which is not mandatory
POL-TA-40049	POL_4028_TestCase
POL-TA-40050	POL_4031_TestCase POL_4032_TestCase
POL-TA-40057	Untestable - requires a measurable required concrete policy
POL-TA-40058	POL_4033_TestCase

Test Assertion	Test Cases
POL-TA-50001	POL_5001_TestCase

Test Assertion	Test Cases
POL-TA-70001	Untestable
POL-TA-70002	Untestable
POL-TA-70003	Untestable
POL-TA-70004	Untestable
POL-TA-70005	Untestable
POL-TA-70006	Untestable
POL-TA-70007	Untestable

Test Assertion	Test Cases
POL-TA-80001	Untestable
POL-TA-80002	Untestable
POL-TA-80003	Untestable
POL-TA-80004	Untestable

Test Assertion	Test Cases
POL-TA-90003	Untestable
POL-TA-90004	Untestable
POL-TA-90006	Untestable
POL-TA-90007	Untestable
POL-TA-90008	Untestable
POL-TA-90009	POL_9006_TestCase
POL-TA-90010	Untestable
POL-TA-90011	Untestable
POL-TA-90012	POL_9009_TestCase
POL-TA-90013	Untestable - No required binding available
POL-TA-90016	Untestable
POL-TA-90017	Untestable
POL-TA-90018	Untestable
POL-TA-90020	Untestable
POL-TA-90021	POL_9015_TestCase
POL-TA-90022	POL_9016_TestCase
POL-TA-90025	POL_9017_TestCase
POL-TA-90026	POL_9018_TestCase
POL-TA-90027	Untestable
POL-TA-90028	Untestable
POL-TA-90030	POL_9009_TestCase
POL-TA-90031	POL_9006_TestCase POL_9019_TestCase
POL-TA-90032	POL_9020_TestCase
POL-TA-90033	POL_9021_TestCase
POL-TA-90034	POL_9022_TestCase
POL-TA-90035	POL_9023_TestCase
POL-TA-90036	POL_9006_TestCase

Test Assertion	Test Cases
POL-TA-100001	POL_3019_TestCase
POL-TA-100002	POL_4030_TestCase
POL-TA-100003	Untestable
POL-TA-100004	Untestable - JMS binding not a required binding
POL-TA-100005	POL_10001_TestCase
POL-TA-100006	Untestable
POL-TA-100007	Untestable - EJB binding not a required binding
POL-TA-100008	Untestable - EJB binding not a required binding

Test Assertion	Test Cases
POL-TA-110001	POL_11001_TestCase

Appendix D. Acknowledgments

The following individuals have participated in the creation of this specification and are gratefully acknowledged

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Appendix E. Revision History

Revision	Date	Editor	Changes Made
1	10/14/09	David Booz	Initial version sections 3 and 4
2	11/11/09	David Booz	Completed first pass of all test cases
3	05/11/10	Mike Edwards	Sync up with TestAssertions CD01
4	05/28/10	David Booz	Misc editorial updates
5	06/04/10	David Booz	More updates based on review comments
6	06/14/10	David Booz	Misc updates from review with TC – applied Issue 120, 121.
CD01	06/21/10	David Booz	Editorial updates for CD01.
CD01 rev1	09/15/10	David Booz	Apply 123,124,125,126
CSD01 rev2	11/10/10	David Booz	Apply 128 and prep for next CSD
CSPRD02	11/10/10	OASIS Admin	CSPRD02
WD021	07/11/11	Mike Edwards	Issue 131 - merged Assertions document into this one as an Appendix - moved Cross Mapping of Test Assertions to Test-cases into Appendix - added Conformance statements - removed TAs 40051 40052 40053 40054 40055 40056 40059 40060 40061 as a result of normative assertions being removed from latest Policy specification. This has no effect on testcases since these TAs had no testcases.
WD022	07/20/11	Mike Edwards	All changes accepted